## **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

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# SOURCE INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** SIR-001241 Address: 333 Burma Road **Date Inspected:** 20-Jul-2009

City: Oakland, CA 94607

OSM Arrival Time: 1200 **Project Name:** SAS Superstructure **OSM Departure Time:** 2359 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Dao, Shangha

**Quality Control Contact:** William (Bill) Oak **Quality Control Present:** Yes No

**Material transfer:** Yes No N/A **Sampled Items:** Yes No N/A **Stock Transfer:** N/A OK to Cut: N/A Yes No Yes No **Rebar Test Witness:** N/A **Delayed/Cancelled:** N/A Yes No Yes No

Other: Coatings Inspection

**Bridge No:** 34-0006 **Component:** Office, Counterweights, Suspender Brackets, I

**Bid Item:** Lot No: 77, 78, 79 B265

## **Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. James Lumley arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections are to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following: Office

Sort and file project documentation.

**ABF** Office

Review and sign ZPMC inspection reports and associated documentation.

Counterweights

CW12, CW16, CW18 Final topcoat application of Interfine 979 inside paint shop #2.

Suspender Brackets

SB10E, SE18E, SB24E, SB10W, SB24W final topcoat application Interfine 979 inside paint shop #2.

Miscellaneous Metal

Approximately 450+- pieces of splice plates and fill plates were repaired by abrasive blasting to base metal and an SSPC SP-10 condition and Interzinc 22 re-applied. These pieces were removed from trial assembly area due to excessive damages from handling and heat damages incurred from trial assembly operations.

**Elevator Support Brackets** 

Base metal surfaces of 96 pieces code # SA1 & SA2 were washed and de-greased in accordance with SSPC SP-1 in preparation of abrasive blasting operations.

Miscellaneous Metal

Interzinc 52 application to bolt holes of splice plates in process alos sanding and dry-spray removal concurrent

# SOURCE INSPECTION REPORT

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with application inside paint shop #2.

Yard Walk

Performed a general site walk with ABF Bill Oak and Caltrans SMR Skyler Guest and observed in process work operations relative to coatings application and damages incurred, areas included but not limited to paint shops 1&2, blast shops 1 &2, trial assembly area east and west line, East and South towers lifts 1&2.

Counterweights

Final topcoat application of Interfine 979 was applied on unit codes # CW22 & CW24 Inside paint shop #2. Surface preparation was rejected by ABF QA representatives due to surfaces contaminated with dirt and deleterious materials on surfaces to be top-coated. Note this was the second inspection on these units. Suspender Brackets

Inspection for surface cleanliness prior to final topcoat application of Interfine 979 was rejected by ABF QA representatives. Bracket codes # SB12E, SB28E, SB12W, SB18W, SB28W. Pinholes were visible and contaminants were visible. Units were re-inspected at 1500 hours and application was allowed to proceed after proper surface preparation was completed.

Couterweights

Code # CW 24 & CW 22 underwent a third (3rd) inspection and were found to be suitable for topcoat of Interfine 979 to commence. ZPMC applied Interfine 979 via airless spray inside paint shop #2.

Bikeway Brackets

Final inspection was requested by ZPMC and units were rejected by ABF QA representatives. Bracket code# BK001-001, BK001-004, BK001-005, BK001-007, BK001-009, BK001-011, BK001-014.

Miscellaneous Metal

Base metal surfaces of approximately 66 pieces of splice plates and trigonal plates were abrasive blasted to an SSPC SP-10 condition and Interzinc 22 applied.

Note: All inspections were performed jointly with ABF & ZPMC QA/QC representatives and Caltrans QA Lumley. International Protective Coatings technical service representatives were available for inspections and consultation.

#### **Summary of Conversations:**

During yard walk with Bill Oak and Skyler Guest topics discussed were related to expent of damages incurred due to ZPMC work practices and means of methods relative to protection of applied coatings and amount of re-work required resultant from lack of care during handling and trial assembly.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang. (858) 699-9549, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Lumley,James	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer